UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5
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Memorandum

Date: 11/29/2006

Subject: Comments on the FBAG Statement of Position to the U.S. EPA Regarding the Fields Brook Superfund Site.

From: Terese A. Van Donsel, Remedial Project Manager, U.S. EPA Region 5

To: Site File

Background

I have been the Remedial Project Manager (RPM) for the Fields Brook Superfund Site since 1997. In that time, I have worked closely with both the Fields Brook Potentially Responsible Parties Organization that conducted the Remedial Investigation and Feasibility Study and the Fields Brook Action Group (FBAG) that designed and implemented the brook cleanup. During that time, I have acted in good faith in my dealings with the various site Potentially Responsible Parties (PRPs). I have been successful in coordinating and moving forward the cleanup decisions and the cleanups in the brook and source control operable units. The decisions that I have made and the recommendations that I have given my management were based upon my best professional judgment, common sense and my understanding of CERCLA and the remedial process.

Claim that U.S. EPA is Going After FBAG Because of Its Financial Resources

In the FBAG's statement of position regarding the source of DNAPL contamination in EU8, the FBAG alleges that U.S. EPA has been less than fair in its dealings with them and has required them to perform work in EU8 because the FBAG is a "bigger pocket" than Detrex. U.S. EPA flatly denies the FBAG's accusation. Had there been any DNAPL or DNAPL residual found north of the floodplain that indicates the presence of subsurface movement, U.S. EPA would have assigned responsibility to Detrex. Assuming U.S. EPA prevails in the dispute and the FBAG goes forward with the work required of them in EU8, the responsibility for DNAPL work in EU8 will shift to Detrex if such evidence is found in the future. U.S. EPA plays no favorites and tries to treat each PRP fairly.

Detrex has indicated that the cost of the interceptor trench is in excess of $300,000. Even without proof of subsurface DNAPL movement, U.S. EPA felt it was appropriate to have

Detrex install the interceptor trench, if only as a measure that provides protectiveness of the brook in the long-term. Detrex's ability to pay was not a consideration in our determination that the work was required and our request for Detrex to perform the work. U.S. EPA anticipates that the cost to remove the pockets of DNAPL seen in EU8 and will be significantly less than the cost for the interceptor trench installation and would not have any difficulty assigning the work to Detrex should field data provide an indication of subsurface DNAPL movement into EU8.

In my years of dealing with FBAG representatives, I have heard unofficial "grumblings" about Detrex's cost share for the cleanup. From comments made by FBAG representatives, it is my understanding that because Detrex was not considered to be a major source of PCBs to the brook, its cost share is relatively low. Once cleanup work in the brook began and significant volumes of DNAPL were found, the cost share that once seemed fair and appropriate became a source of resentment for the rest of the PRPs, who were left having to disproportionately fund a cleanup for material (DNAPL) that came from the Detrex facility. U.S. EPA is not a party to the PRPs' cost share that was negotiated for the cleanup and therefore takes no position on it. U.S. EPA must deal with actions required in the brook according to the terms of the Consent Decree, and as such must (absent any concrete evidence of subsurface migration and recontamination) hold the FBAG responsible for the work in EU8. In light of the comments made by FBAG representatives over the years, I surmise that the FBAG is using this opportunity and this dispute as a mechanism to try to sever its responsibilities for DNAPL in the brook.

FBAG Criticism of U.S. EPA Work Requirements for Detrex and Design Decisions

The FBAG's Statement of Position further states that U.S. EPA has been derelict in its responsibilities coordinating and enforcing the Detrex cleanup work. This accusation is partly based on the change in the extent of the Detrex slurry wall from the conceptual design in the FS. The design for the slurry wall was prepared by Detrex (using the same contractor that prepared the Source Control RI and the FS) and reviewed by U.S. EPA and the U.S. Army Corps of Engineers. The reviews were conducted consistent with the conceptual site model of that time, which been prepared by the Fields Brook Potentially Responsible Parties Organization. Based on the understanding of the site at that time, the shorted slurry wall was deemed acceptable. For the FBAG to now state that U.S. EPA should have required Detrex to implement a different slurry wall configuration is unfair. In the last year, the FBAG has changed its conceptual model to explain DNAPL presence in the brook. According to its statements, the FBAG expects that U.S. EPA should have based its reviews and decision-making from years ago on this newly development conceptual model.

The FBAG also takes issue with the fact that U.S. EPA did not require Detrex to install all of the DNAPL extraction wells identified in the FS. It is true that a limited number of DNAPL extraction wells were installed by Detrex and more need to be installed. However, it was a reasoned and appropriate decision for U.S. EPA to allow and even direct Detrex to phase its implementation of the extraction wells. It did not make sense to throw all of the wells in at one time when we had limited information on how easily the

product could be removed and handled and what the radius of influence of the wells would be. Detrex has had significant difficulties with the extraction wells and has had to make quite a few modifications, both in terms of the system construction and in the operational procedures. With the knowledge gained by operating this first phase of wells, a better expanded system can ultimately be installed.

Fields Brook Cleanup and Identification of DNAPL Areas

Despite years of study, the RI for the Fields Brook site never identified the mass of DNAPL present in the brook. When the material was found during cleanup, the FBAG developed an approach to estimate the extent and track DNAPL in the field. To determine the extent of DNAPL, the FBAG used geoprobe sampling and trenching. Once excavation and removal of DNAPL-impacted soil and sediment commenced, the FBAG attempted to chase the DNAPL using visual observations and field screening with a PID. As the FBAG acknowledges and emphasizes in its Statement of Position, DNAPL is very hard to find and can travel in small and hard-to-find seams. Therefore, it seems reasonable that the FBAG's practical approach for identifying DNAPL-impacted soils and sediments was not perfect and failed to remove all DNAPL and DNAPL-impacted soil and sediment. After all, excavation is a sloppy undertaking and the act of removing material could have closed off pockets of DNAPL making them difficult to identify. With all of the acknowledged difficulties with finding DNAPL, it is unclear how the FBAG expects U.S. EPA to accept its proposition that the DNAPL found in EU8 is from subsurface migration if it does not recognize the more likely scenario that its work failed to find and remove all of the DNAPL present in EU8.

Subsurface DNAPL Movement

I have reviewed the information submitted by the FBAG that contends that the pockets of DNAPL found in 2005 were the result of subsurface migration from the Detrex source area. It is clear that DNAPL certainly can move as outlined by the FBAG. I am certainly not disputing the theory put forward by the FBAG. However, we have yet to find clear evidence in the field that this is what is occurring in EU8. There appears to be a large clean area between the floodplain and the known Detrex source area. In this area, geoprobe sampling and extensive trenching have failed to turn up evidence of the DNAPL movement hypothesized by the FBAG. If such subsurface movement is and has been a source of DNAPL to the brook, one would expect at least some indication of residuals somewhere between the source area and the floodplain. Therefore, it seems more likely to me that the DNAPL found in EU8 is material that was not removed during the brook cleanup and that has been redistributed by the dynamics of the brook.

The FBAG has indicated that some of the DNAPL found was in new fill material added at the time of the original brook cleanup. I do not see this observation in itself as an indication of subsurface movement of DNAPL. It is merely an indication of DNAPL movement within the floodplain. The energy of the stream can displace gravel and filter fabric (as I have recently observed in EU 6), so it does not surprise me that material, including DNAPL, within the floodplain can be redistributed. Also, if the fill placed in

the area was less compacted than surrounding natural materials, it could be more permeable and therefore could become an advantageous pathway for DNAPL movement in the system.

Conclusion

Based on data that has been collected in EU8, it is my opinion that the DNAPL found in 2005 in EU8 is the result of an incomplete cleanup. There is insufficient information to determine that the DNAPL found is from a continuing subsurface source at Detrex.